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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,299	03/08/2001	Weng Wah Loh	10003688-1	7115

7590 08/05/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
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EXAMINER  
CAO, CHUN

ART UNIT	PAPER NUMBER
2115	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

4

## Office Action Summary

**Application No.**

09/802,299

**Applicant(s)**

LOH ET AL.

**Examiner**

Chun Cao

**Art Unit**

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-13,15-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-13,15-18 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**FINAL REJECTION**

1. Claims 1, 3-7, 9-13, 15-18 and 20-22 are presented for examination. Applicants have canceled claims 2, 8, 14 and 19.
2. The text of those applicable section of Title 35, U.S. Code not included in this action can be found in the prior Office Action.

***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The rejections are respectfully maintained and reproduced infra for applicant's convenience.

Art Unit: 2115

5. Claims 1, 4-7, 10-13, 16-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al. (Braun), U.S. Patent No. 4,621,319 in view of Cai et al. (Cai), U.S. Patent No. 6,631,474 and Sellers (Sellers), US publication no, 2001/0019369.

As per claim 1, Braun discloses a portable computing device comprising:

a keyboard controller [14, fig. 1] having a first input for receiving keystroke inputs [12, fig. 1] and having an output [see line between 14 and 40 in fig. 1] for conveying said keystroke inputs [12, fig. 1] to a main processor [16, fig. 1]; and

a secondary processor [18, fig. 1] having an interface [processor B had the same component as 40 of processor A in fig. 1] to said keyboard controller [14, fig. 1] through a secondary bus [the line between 14 and 18], wherein said keyboard controller also conveys said keystroke inputs to said secondary processor through said secondary bus [see the line between 14 and 18; col. 3, lines 18-20].

Braun does not disclose a secondary bus being used to communicate with a battery module, and the secondary bus is an I2C bus.

Cai discloses a portable computing device comprising:

a secondary bus [the line connecting ICL and power supply] is used to communicate [col. 3, lines 9-12] with a battery module [fig. 1; col. 4, lines 2-5].

Sellers discloses a keyboard controller communicate with a battery module through a secondary bus, wherein the secondary bus is an I2C bus [fig. 1; paragraph 24].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Braun and Cai and Sellers because the specify teachings of Cai and Sellers stated above would improve the power consumption of Braun system by controlling a battery module via a secondary bus when the system is under low power mode and implementing the second bus as I2C bus which is well known in the art (the teaching of Sellers).

As per claim 4, Cai discloses that the secondary processor included an interface to a memory space [col. 4, lines 48-51]. It would have been obvious to one of ordinary skill in the art to create a database that stores a plurality of name and corresponding contact information.

As per claim 5, Cai discloses that the secondary processor includes an interface to other components (such as a network interface) of the computer system through ICL [fig. 1, col. 3, lines 9-13]. Since a network interface is a basic component of a computer system, therefore, it is obvious to one of ordinary skill in the art to enable said secondary processor to execute a World Wide Web browsing function in association with said network interface.

As per claim 6, Cai discloses that the secondary processor includes an interface to other components (such as an audio subsystem) of the computer system through ICL [fig. 1, col. 3, lines 9-13]. Since an audio subsystem is a basic component of a computer system, therefore, it is inherently obvious that said secondary processor includes an interface to a share audio subsystem.

As to claims 7 and 10-11, Braun and Cai and Sellers together teach the claimed system. Therefore, Braun and Cai and Sellers together teach the claimed method of steps to carry out the system.

As per claim 12, it is obvious to one of ordinary skill in the art to make a secondary processor to execute a Java application program.

As to claims 13, 16 and 17 are written in mean plus function and contained same limitations as claims 7, 10 and 11. Therefore same rejection is applied.

As to claims 18, 21 and 22 are written in mean plus function and contained same limitations as claims 7, 10 and 11. Therefore same rejection is applied.

6. Claims 3, 9, 15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Braun et al. (Braun), U.S. Patent No. 4,621,319 in view of Cai et al. (Cai), U.S. Patent No. 6,631,474 and Sellers (Sellers), US publication no, 2001/0019369 as applied to claim 1 above, and further in view of Cheng (Cheng), US publication no, 2002/0066048.

As per claim 3, Cheng discloses a portable computing device comprising:  
a keyboard controller additionally receives inputs from a graphical pointing device that directs an indicator to move correspondingly about a computer screen [see line for pointing device and external mouse in fig. 3; paragraph 0031].

It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Braun and Cai and Sellers and Cheng because the specify teachings of Cheng stated above would improve the functionality of Braun system. Since a graphical pointing device is one of the widely used input device in a portable

Art Unit: 2115

computer system and Cheng's device provides a way for a keyboard controller to receive inputs from it.

As to claims 9, 15 and 22, is contained same limitation as claim 3. Therefore, same rejection is applied.

7. Applicant's arguments filed on 5/21/04 have been fully considered but are not persuasive.

8. In the remark, Applicant argued in substance that in Sellers system, there does not appear to be any suggestion or mention of any consideration regarding a need to reduce power consumption, therefore Sellers would be incompatible with the design goals set forth by Cai. In other word, there is not reason to combine Braun and Cai and Sellers.

9. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Braun and Cai fail to disclose a secondary bus as I2C bus. However, Sellers discloses that a keyboard controller communicate with a battery module through a secondary bus, wherein the secondary bus is an I2C bus [fig. 1; paragraph 24]. It would have been obvious to one of ordinary skill in the art at time the invention to combine the teachings of Braun and

Art Unit: 2115

Cai and Sellers because the specify teachings of Cai and Sellers stated above would improve the power consumption of Braun system by controlling a battery module via a secondary bus when the system is under low power mode and implementing the second bus as I2C bus which is well known in the art (the teaching of Sellers).

10. **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).



Art Unit: 2115


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun Cao at (703) 308-6106. The examiner can normally be reached on Monday-Friday from 7:30 am - 4:00 pm. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor Thomas Lee can be reached at (703) 305-9717. The fax number for this Art Unit is following: Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 306-5631.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chun Cao

July 27, 2004



THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100